



December 13, 2010

Chairman Julius Genachowski  
Commissioner Michael J. Copps  
Commissioner Robert M. McDowell  
Commissioner Mignon Clyburn  
Commissioner Meredith Attwell Baker  
Mr. Julius P. Knapp, OET  
Ms. Ruth Milkman, WTB  
Mr. Zachary Katz, Office of the Chairman  
Mr. Edward Lazarus, Office of the Chairman  
Ms. Marlene Dortch, Secretary  
Federal Communications Commission  
445 12th St SW  
Washington, DC 20554

Re: Rules for fixed wireless in upcoming "open Internet" Order  
GN Docket No. 09-191: In the Matter of Preserving the Open Internet  
GN Docket No. 09-51: A National Broadband Plan for Our Future  
WC Docket 05-25: Special Access Rates for Price Cap Local Exchange Carriers  
WC Docket No. 07-52: Broadband Industry Practices  
GN Docket No. 09-137: Advanced Telecommunications Deployment

To Whom It May Concern:

I write today to address an urgent matter which is of vital importance to broadband users throughout our country - especially those who use fixed wireless broadband service or are advantaged indirectly by the competition it provides to the marketplace. As you know, an "open Internet" Order has been placed on the Commission's December agenda. While -- despite promises of increased agency transparency -- a draft of this order has not been made public, the Chairman's remarks and the buzz of conversation regarding the Order have indicated that it has a vital flaw which could be especially damaging to broadband deployment, competition, and availability. To wit: it appears that the current draft of the Order exempts mobile wireless, but not fixed wireless, from requirements that would destroy the economic sustainability and/or technical feasibility of providing wireless broadband service. Fixed wireless broadband deserves the same, if not a greater, exemption from problematic and onerous regulations for the following reasons:

- WISPs -- terrestrial fixed wireless broadband providers - serve more than 2 million Americans nationwide, many of them unreachable by any other terrestrial broadband technology. (See the report provided to the Commission by CITI during the National Broadband Plan proceeding.) Unlike satellite broadband service, WISPs' service is suitable for use with VoIP and other applications where latency and jitter are concerns. WISPs have lower deployment costs per square mile than any other form of broadband. However, profit margins are still extremely low, and the imposition of regulations could not only make future deployments economically infeasible but make many existing deployments unsustainable.

- Terrestrial, fixed wireless broadband faces all of the same economic and logistical challenges and obstacles as mobile broadband -- including local restrictions on tower siting and the difficulty of bringing adequate bandwidth to the tower at a reasonable cost. Alas, the latter problem has been exacerbated because the Commission -- in its drive to impose "open Internet" regulations -- has not heeded the priorities laid out in the National Broadband Plan and has not kept to the timetable which it laid out after the publication of the Plan. The severe problem of excessive and anticompetitive "special access" pricing has been placed on the back burner; and thus the bandwidth costs faced by fixed wireless providers continue to be 10 to 100 times as great as those of wireline providers. Furthermore, because most WISPs are small, independent businesses, they do not have the benefit of the cozy business relationships which exist between large incumbent carriers. They frequently pay \$425 or more per Mbps per month -- this is not a typographical error -- for bandwidth delivered to their towers.
- Because fixed wireless broadband service is usually connected to PCs with large screens (as opposed to mobile devices) and usually serves several computers, gaming devices, and/or video devices in a household, customer expectations regarding both throughput and quality are greater for fixed wireless broadband connections. They cannot simply move to another location if they cannot "hear you now."
- The majority of fixed wireless broadband providers have no access to the exclusively licensed spectrum available to mobile providers, and operate on congested and noisy unlicensed spectrum. The laws of physics and information theory limit the throughput which can be achieved over such spectrum, necessitating extremely careful management of bandwidth, latency, and other parameters of the network.
- The technical requirements and service demands mentioned above also require WISPs to specify and engineer each customer's wireless link, and the entire network, with great care. Connecting an arbitrary device to the network without proper engineering, or allowing software which attempts to monopolize or abuse the network, would not only result in substandard service but could cripple or bring down the network altogether.

Therefore, requirements such as one to allow "any device" on a fixed wireless provider's network are even less appropriate than they are for mobile networks. For all of the above reasons, it is vital that the Commission, in its proposed rules, place no greater requirements on fixed wireless broadband than on mobile broadband. To do otherwise would not only jeopardize the goals outlined in the National Broadband Plan and harm economically disadvantaged broadband users by raising the cost of serving them. It might also deprive existing users of their broadband connections, moving our nation backward, rather than forward, on its path toward ubiquitous broadband access. Due to immediate deleterious impacts upon investment, these damaging effects would be likely to occur even if the Commission's Order was later invalidated, nullified, or effectively modified by a court challenge or Congressional action.

Because this letter constitutes an ex parte communication with reference to the above mentioned proceedings, a copy is being filed electronically via the Commission's Electronic Comment Filing System as per Section 1.1206(b)(2) of the Commission's rules.

Sincerely,



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